

PAPERWORK REDUCTION ACT SUBMISSION

Please read the instructions before completing this form. For additional forms or assistance in completing this form, contact your agency's Paperwork Clearance Officer. Send two copies of this form, the collection instrument to be reviewed, the supporting statement, and any additional documentation to: Office of Information and Regulatory Affairs, Office of Management and Budget, Docket Library, Room 10102, 725 17th Street NW, Washington, DC 20503.

1. Agency/Subagency originating request	2. OMB control number b. <input type="checkbox"/> None a. _____ - _____
3. Type of information collection (<i>check one</i>) a. <input type="checkbox"/> New Collection b. <input type="checkbox"/> Revision of a currently approved collection c. <input type="checkbox"/> Extension of a currently approved collection d. <input type="checkbox"/> Reinstatement, without change, of a previously approved collection for which approval has expired e. <input type="checkbox"/> Reinstatement, with change, of a previously approved collection for which approval has expired f. <input type="checkbox"/> Existing collection in use without an OMB control number For b-f, note Item A2 of Supporting Statement instructions	4. Type of review requested (<i>check one</i>) a. <input type="checkbox"/> Regular submission b. <input type="checkbox"/> Emergency - Approval requested by _____ / _____ / _____ c. <input type="checkbox"/> Delegated
	5. Small entities Will this information collection have a significant economic impact on a substantial number of small entities? <input type="checkbox"/> Yes <input type="checkbox"/> No
	6. Requested expiration date a. <input type="checkbox"/> Three years from approval date b. <input type="checkbox"/> Other Specify: _____ / _____
7. Title	
8. Agency form number(s) (<i>if applicable</i>)	
9. Keywords	
10. Abstract	
11. Affected public (<i>Mark primary with "P" and all others that apply with "x"</i>) a. <input type="checkbox"/> Individuals or households d. <input type="checkbox"/> Farms b. <input type="checkbox"/> Business or other for-profit e. <input type="checkbox"/> Federal Government c. <input type="checkbox"/> Not-for-profit institutions f. <input type="checkbox"/> State, Local or Tribal Government	12. Obligation to respond (<i>check one</i>) a. <input type="checkbox"/> Voluntary b. <input type="checkbox"/> Required to obtain or retain benefits c. <input type="checkbox"/> Mandatory
13. Annual recordkeeping and reporting burden a. Number of respondents _____ b. Total annual responses _____ 1. Percentage of these responses collected electronically _____ % c. Total annual hours requested _____ d. Current OMB inventory _____ e. Difference _____ f. Explanation of difference 1. Program change _____ 2. Adjustment _____	14. Annual reporting and recordkeeping cost burden (<i>in thousands of dollars</i>) a. Total annualized capital/startup costs _____ b. Total annual costs (O&M) _____ c. Total annualized cost requested _____ d. Current OMB inventory _____ e. Difference _____ f. Explanation of difference 1. Program change _____ 2. Adjustment _____
15. Purpose of information collection (<i>Mark primary with "P" and all others that apply with "X"</i>) a. <input type="checkbox"/> Application for benefits e. <input type="checkbox"/> Program planning or management b. <input type="checkbox"/> Program evaluation f. <input type="checkbox"/> Research c. <input type="checkbox"/> General purpose statistics g. <input type="checkbox"/> Regulatory or compliance d. <input type="checkbox"/> Audit	16. Frequency of recordkeeping or reporting (<i>check all that apply</i>) a. <input type="checkbox"/> Recordkeeping b. <input type="checkbox"/> Third party disclosure c. <input type="checkbox"/> Reporting 1. <input type="checkbox"/> On occasion 2. <input type="checkbox"/> Weekly 3. <input type="checkbox"/> Monthly 4. <input type="checkbox"/> Quarterly 5. <input type="checkbox"/> Semi-annually 6. <input type="checkbox"/> Annually 7. <input type="checkbox"/> Biennially 8. <input type="checkbox"/> Other (describe) _____
17. Statistical methods Does this information collection employ statistical methods <input type="checkbox"/> Yes <input type="checkbox"/> No	18. Agency Contact (person who can best answer questions regarding the content of this submission) Name: _____ Phone: _____

19. Certification for Paperwork Reduction Act Submissions

On behalf of this Federal Agency, I certify that the collection of information encompassed by this request complies with 5 CFR 1320.9

NOTE: The text of 5 CFR 1320.9, and the related provisions of 5 CFR 1320.8(b)(3), appear at the end of the instructions. *The certification is to be made with reference to those regulatory provisions as set forth in the instructions.*

The following is a summary of the topics, regarding the proposed collection of information, that the certification covers:

- (a) It is necessary for the proper performance of agency functions;
- (b) It avoids unnecessary duplication;
- (c) It reduces burden on small entities;
- (d) It used plain, coherent, and unambiguous terminology that is understandable to respondents;
- (e) Its implementation will be consistent and compatible with current reporting and recordkeeping practices;
- (f) It indicates the retention period for recordkeeping requirements;
- (g) It informs respondents of the information called for under 5 CFR 1320.8(b)(3):
 - (i) Why the information is being collected;
 - (ii) Use of information;
 - (iii) Burden estimate;
 - (iv) Nature of response (voluntary, required for a benefit, mandatory);
 - (v) Nature and extent of confidentiality; and
 - (vi) Need to display currently valid OMB control number;
- (h) It was developed by an office that has planned and allocated resources for the efficient and effective management and use of the information to be collected (see note in Item 19 of instructions);
- (i) It uses effective and efficient statistical survey methodology; and
- (j) It makes appropriate use of information technology.

If you are unable to certify compliance with any of the provisions, identify the item below and explain the reason in Item 18 of the Supporting Statement.

Signature of Senior Official or designee

Date

Agency Certification (signature of Assistant Administrator or head of MB staff for L.O.s, or of the Director of a Program or Staff Office)	
Signature	Date
Signature of NOAA Clearance Officer	
Signature	Date

SUPPORTING STATEMENT

Federal Fisheries Vessel Monitoring System Northeast Region SEA SCALLOP EXEMPTION REQUIREMENTS

INTRODUCTION

This submission requests approval of Office of Management and Budget (OMB) for the Sea Scallop Exemption Requirements. This submission affects currently cleared requirements under OMB 0648-0202 and 0648-0307. The New England Fishery Management Council (Council) is proposing a Framework Adjustment to the Scallop FMP (13) and Multispecies FMP (34). The proposed measures include reporting requirements for vessel owners and operators.

A. JUSTIFICATION

1. Why is the information necessary?

These frameworks create seasonal Sea Scallop Exemption Areas within the multispecies closed areas on Georges Bank and Nantucket Shoals. The closed areas are known as Closed Area I (CA I), Closed Area II (CA II), and the Nantucket Lightship Closed Area (NLCA). The following are some of the primary management measures for vessels fishing in the exemption areas: a possession limit of up to 10,000 lb of scallop meats per trip; a maximum of three CA II trips, two CA I trips, and one NLCA trip for vessel permitted in the full-time and part-time categories (vessels permitted in the occasional category will be allocated only one trip from either area); an automatic minimum deduction of 10 days-at-sea (DAS) for each trip; a minimum mesh twine-top of 10 inches; a yellowtail flounder total allowable catch (TAC) of 757 metric tons (mt) for CA I and CA II combined and 50 mt for the NLCA; an increase in the regulated species possession limit from 300 lb to 1,000 lb; an increase in the Vessel Monitoring System (VMS) polling frequency from one per hour to twice per hour; and a research TAC set-aside of 191,000 pounds of scallop meats to fund scallop research activities.

The intent of this action is provide scallop vessels with a short-term strategy to access the closed areas while the Council develops an amendment that would implement a sea scallop area rotational management plan. The VMS is a comprehensive information system that serves as an important enforcement tool. Enforcement officials will utilize the VMS unit to enforce the management measures and identify participants of the Scallop Exemption Program (SEP) and monitor their activity and landing levels. The VMS unit also plays a critical role in monitoring catch levels to prevent overfishing. This action contains reporting requirements for vessel owners and operators that include information on fishing catch (scallops) and by-catch (yellowtail flounder) obtained through a mandatory observer program and reported through the VMS units. For the purposes of the Paperwork Reduction Act, the following are the VMS requirements requested for approval for this action:

VMS Installation (Revision to Existing Requirement):

All occasional permitted vessels that participate in the SEP must install an operational VMS aboard the vessel. Regulations implementing the Atlantic Sea Scallop FMP already require full-time and part-time permitted vessels to install and maintain an operational VMS aboard their vessels.

Additionally:

- This action assigns separate scallop and yellowtail flounder TAC's to the re-opened portion of CA I, CA II, and the NLCA. The VMS provides a means to verify reported catch and by-catch, prior to landing, so that the TAC's can be accurately tracked and at-sea transfer prevented.
- The VMS is already required on almost all the eligible boats, and will help in the enforcement of other closed areas during the re-opening period. Scallop vessels will be allowed to fish in areas closed to groundfish vessels. With VMS on board, patrol units will be able to rapidly identify any scallop vessels in the closed areas, helping them sort contacts in the areas.
- Only those vessels that give notice of their intent to take one of their allocated SEP trips are allowed into the re-opened closed areas (only one exempted trip for Occasional vessels).

Daily VMS Reporting (New Requirement):

1. For vessels with a NMFS Observers aboard:
 - A daily report of total scallops kept
 - A daily report of total yellowtail caught and scallops kept for observed tows only
 - A daily report of the Fishing Vessel Trip Report log page
2. For all vessels without a NMFS Observers aboard:
 - A daily report of total scallops kept
 - A daily report of the Fishing Vessel Trip Report log page

Other VMS Reporting (New Requirement):

Any vessel intending to participate in the SEP must report to NMFS its intention to fish in any of the exemption areas no later than 15 days prior to the scheduled opening of each of the three areas. A vessel reporting its intent to fish in the SEP must e-mail the following information at least 15 days prior to the reopening of each area it intends to fish in: Vessel name and permit number, owner and operator's name, owner and operator's phone numbers, and number of trips anticipated for the month in question.

In addition to the general notification required above, in order to facilitate the random observer selection process a vessel must provide NMFS with notice at least five working days prior to the date it intends to depart into a specific exemption area. Vessels may use the VMS e-mail messaging system or a personal computer equipped with e-mail messaging.

Increase in VMS Polling Frequency (Revision to Existing Requirement):

This action will increase the polling frequency for vessels with VMS units to an average of twice per hour, from the current one per hour. The increase in polling frequency will apply to all vessels with a VMS unit regardless of whether the vessel is a participant of the SEP or not. The increased in polling frequency will enhance the monitoring capability to catch violators when fishing in the closed areas. Since the average polling would be every 30 minutes, there would be a fifty percent chance of detecting entries into the closed areas of more than 15 minutes.

This action proposes to set-aside one percent of the scallop TAC for a special harvest of scallops under a scallop research program. Scallop vessels may be authorized to land additional scallop meats on a scallop SEP trip or be allocated a specified amount of scallop meats on a separate trip (compensation trip), independent of the SEP trip. The additional overage or allotment of scallop meats will be used to fund scallop research. A set-aside is necessary to fund and enable important scallop research in the closed areas. This information about the scallop resource, including ways to reduce bycatch and habitat loss, as well as, other information will be crucial as the Council debates an area-based management scheme.

2. How, and by whom, will the information be used?

Several offices of NMFS and the U.S. Coast Guard will use the information. The data collected through these programs will be incorporated into the NMFS databases. Aggregated summaries of the collected information will be used to evaluate the management program and future management proposals. Individual permit information will be required, however, for law enforcement or notification programs.

3. Can improved technology reduce the burden?

This proposal uses improved, existing technology to reduce reporting burdens. The VMS unit is used to monitor fishing locations in the Atlantic sea scallop fishery. This electronic system broadcasts the vessel's position on a random, periodic basis. The addition of onboard observers and use of VMS messaging to report real-time scallop catch and yellowtail flounder by-catch are significant management information and enforcement tools. This technology also helps verify fishing locations and monitoring of effort controls in other area closures. This system is expected to benefit fishermen by making it more difficult to misreport catch, by-catch, and location. This will result, in concert with the mandatory observer program, in a more accurate monitoring of the area TACs. It will also facilitate monitoring of the fishery by enforcement agents. In fact, if these

technologies were not available or were not used, it is extremely unlikely that the New England Council would have approved the exempted fishery for scallops.

4. Describe any duplication of effort

The duplication of effort to collect landings and by-catch data is necessary to assure that the TAC for scallops, and the trigger for closing the exempted fishery based on yellowtail by-catch, is not exceeded. The duplication of effort is described in item 7.

5. How are the impacts on small business minimized?

Most of the respondents qualify as small businesses. Only the minimum data needed to monitor compliance with regulations are requested from all respondents; i.e., observers are reporting scallop catch and yellowtail by-catch once per day. VMS is required for all vessels participating in the SEP for scallops in the closed areas.

6. Could the collection be conducted less frequently?

No. Daily messages are necessary to chart the course of the SEP and assure that scallop TAC and yellowtail by-catch limits are not exceeded, particularly with hundreds of vessels operating at the same time. Hourly transmissions are required to accurately determine the fishing locations. More frequent (than hourly) transmissions may be required to enforce closed areas.

7. Explain if request is not consistent with OMB guidelines.

The data collection is consistent with OMB guidelines, except that the VMS will be required to report vessel catch and by-catch on a daily basis when the vessel is underway in closed areas. As described above, daily reports are required to accurately determine scallop catch and yellowtail flounder by-catch, particularly in a fishery managed with area specific TAC's. This is the only way that actual catch and landings can be verified on a near real-time basis. Although Fishing Vessel Trip Reports (FVTR) are required within 30 days and include gross fishing areas, the auditing process lengthens the time for the information to reach management offices to about 3 months. The SEP is only a seven-month period, and would conclude before the actual landings and by-catch are known. In addition, absent a VMS, there is no way to verify the catch locations as reported on the form.

As a way to determine the pool of vessels on which to place observers, each vessel operator will be required to inform NMFS of its intention to fish in the exemption area on a monthly basis through the VMS e-mail system. Vessels must report this information prior to the 15th of the month preceding the month in question along with the following information: Vessel name and permit number, owner and operator's name, owner and operator's phone numbers, and number of trips anticipated for the month in question. In addition, any vessel selected to take an observer must provide five working days notice prior to any trip on which it declares into the exemption.

8. Describe efforts to get comments from outside the agency.

The specific requirements of Framework 13 & 34 were developed over the course of about 6 months and received extensive public discussion in Council, committee and industry advisory meetings. The New England Fishery Management Council held two public meetings, during the November 1999 and January 2000 Council meetings, at which there was a public discussion of the monitoring requirements. Interested parties were provided the opportunity to submit written comments at that time.

9. Explain any decision to provide payment to respondents.

No payment or gift will be made to respondents. Observers will be paid from the proceeds of an additional allocation over and above the trip limit.

10. Describe any assurances of confidentiality.

All data will be kept confidential as required by NOAA Administrative Order 216-100, Confidentiality of Fisheries Statistics, and will not be released for public use except in aggregate statistical form (and without identifying the source of data, i.e. vessel name, owner, etc.)

11. Provide justification for any questions of a sensitive nature.

There are no questions of a sensitive nature.

12. Provide an estimate in hours of the burden of collection of information.

Table 1 summarizes the burden hours, number of respondents, and total burden of the VMS reporting requirements and increase in VMS polling frequency. The burden hours are based on the number of participants expected in the SEP. Regulatory changes contained in this action add daily catch/by-catch reports to previously approved burden estimates for vessel monitoring requirements (hourly location transmissions). New numbers reflect estimates for the SEP only; thus previously approved estimates for other fisheries, including the normal fishery under the Sea Scallop FMP, are unaffected. The exact number of current participants is the number of limited access, scallop permit holders.

Vessel Monitoring System (VMS)

The plan's use of TAC's assigned by area to control fishing mortality makes it essential there be confidence that reported catch, by-catch, and locations are accurate. For this reason, all vessels in the SEP will be required to use a VMS approved by the NMFS Regional Administrator. Vessels without VMS may not participate in the SEP. Occasional scallop vessels not currently required to have VMS, may purchase or lease VMS in order to take their allocation of one trip within the re-opened portion of the closed areas.

The VMS will help enforce scallop catch and yellowtail flounder by-catch TAC's. The VMS will continue to provide a record of the vessel's location that can be compared to reported fishing

locations to verify accurate reporting. There are areas open to fishing near the closed areas. The large size of the spawning closures makes it difficult for enforcement units to monitor the boundaries, therefore, an increase in the VMS polling frequency will be required for all vessels with VMS units during the SEP season. The VMS will allow patrol units to rapidly identify the location of SEP boats so it can be confirmed that they are the only fishing vessels in the closed areas.

The SEP is only for the fishing year 2000, thus all eligible, extant vessels are expected to participate. As of January 10, 2000, there were 267 limited access scallop vessels that were not history permits. Table 2 summarizes the characteristics of these vessels. Of the 21 Occasional scallop vessels, four are scallop dredge vessels and 17 are scallop trawl vessels. It is not anticipated that the four scallop dredge vessels and 17 scallop trawl vessels will participate in the SEP due to the 10 DAS allocation for the 2000-2001 fishing year and the requirement of installing a VMS. It is also anticipated that the 17 scallop trawl vessels will not participate due to the additional cost of re-rigging their scallop trawl vessels to dredge vessels. If these occasional vessels decide to participate, installation of the VMS will probably require the presence of the owner or his representative. The installation time is estimated to take 60 minutes, for a total burden of 21 hours. The burden of the VMS is estimated at 5 minutes for submission of proof of VTS installation, for a total burden of 105 minutes.

VMS / Observer Reporting Burden

The estimated time per response, which in the case of VMS is the reporting burden, varies with type of equipment and requirement. Upon installation, vessel monitoring or transponder systems (such as Boatracs, a currently approved VMS vendor) automatically transmit data, which takes about 5 seconds. For requirements to transmit data on Inmarsat (currently not an approved VMS vendor) communications units, transmissions take about 10 minutes. There are estimated to be 21 additional scallop vessels that will be required to have VMS. These 21 Occasional vessels are only allowed to take one, 10 day SEP trip, for a total of 210 DAS. If the 21 vessels that will be required to have a VMS all fish 10 days, and transmit a 5-second (0.0014 hour) report every hour, the total burden is 7.06 hours for a transponder type system.

The electronic reporting requirements are required by the vessel owner or observer assigned to the trip. Observers submit reports of catch to the NMFS Office for Enforcement, NE Division, for use by in-season management, of the scallop quotas and yellowtail flounder bycatch allowances. In the North Pacific, most industry and many observer reports had been submitted by fax. As a result, transmission and processing of reports were costly, time-consuming, and could be inefficient both for NMFS and the industry. Electronic communication by observers of various reports will greatly improve efficiency and reduces the costs associated with report submission and processing.

All SEP vessels, including those subject to observer coverage, must have or obtain an operational VMS aboard their vessel. These VMS units incorporate electronic communication equipment that can facilitate electronic reporting of fisheries data. The equipment includes satellite communication units for at-sea vessels, and computer hardware and software. These requirements do not impose a substantial burden on the industry other than purchasing and

installing the necessary VMS equipment. The burden on the industry of submitting Observer reports through their VMS may in fact be reduced under these regulations. All 267 limited access scallop vessels are affected by Observer reporting requirements, including the 21 Occasional vessels that must purchase or lease VMS to participate in the SEP.

Annual transmission of data time from 267 vessels, based on 14,970 fishing days per season and observers transmitting an average of 10 minutes per day = 14,970 days x 10 mins. = 2,496 hours. [The 246 full-time and part-time vessels are allocated 60 DAS, for a total of 14,760 DAS in the SEP; 21 Occasional vessels, allocated 10 DAS each, total 210 DAS.] Total annual cost to the public, however, based on the number of messages and 79 cents fixed rate per VMS e-mail message (Boatrac), is \$11,826.30 [14,970 days, one report per day, times \$.79].

All SEP vessels must notify via VMS message their intent to fish in the closed areas for any given month (fifteen days prior to the month). Hour burdens and costs are itemized in Table 1. Full-time and part-time vessels incur a reporting burden of 73.9 hours and \$1,749.06; occasional vessels, 0.70 hours and \$16.59. Cost is the product of the number of messages times 79 cents fixed rate per VMS e-mail message.

Increase in VMS Polling Frequency

Vessels that have a VMS unit will be required to have the polling frequency increased to an average of twice per hour, from the current one per hour. The increase in polling frequency will apply to all vessels with a VMS unit regardless of whether the vessel is a participant of the SEP or not. Transmission of polling data from 267 vessels, based on 10,408 actual fishing days per season (8 days per trip). The polling frequency increases a poll every hour. Subsequently, 10,408 days represents 249,792 additional polls (10,408 days x 24 hours). The VMS unit will automatically transmit the polling data at an average of average of 30 seconds per poll = 249,792 polls x 30 seconds = 2,073.27 hours. The cost associated with this increase in polling frequency represents a cost of \$124,896 (249,792 polls at \$0.50 per poll).

13. Provide estimates of the burden of the collection on the public.

The costs for the additional (21 Occasional vessel) VMS reporting requirements under the SEP are estimated at \$56,700 a year (Table 3). The costs to the public from VMS requirements include the cost of the equipment, installation and monthly message costs. The costs described below are high because the leasing rates for such limited use may be re-negotiated with Boatrac (i.e., these vessels do not need a two or three-year lease for a one-time 10-day fishery)

A. Annualized capital and start-up costs

VMS systems selected for use must be approved by the Regional Administrator. Currently there is only one vendor that offers VMS equipment approved for use in the Northeast Region - Boatrac, Inc. There is the possibility, however, that equipment based on the Inmarsat C communication system may be approved in the future. Boatrac system purchase and installation costs about \$6,000. Boatrac offers a lease – to – own option at \$4,258/year for a 24-month

lease or \$3,029/year for 36 months.¹ An Inmarsat C system installation will range from \$3,400 to \$5,400 because of various options available, with an additional \$400 charge for installation.

The annualized equipment costs based on a five-year amortization of the purchase and installation price is \$1,200 for Boatracs and \$1,160 (maximum) for an Inmarsat C system. These costs should be compared with the potential benefits from the regulations as will be discussed below. Table 3 shows the total costs of VMS monitoring to the public (excluding the costs of proof of installation given in Table 1) under the proposed regulations.

Verification of the VMS installation must be provided to NMFS as part of the annual permit process. Of the 21 Occasional scallop vessels, four are scallop dredge vessels and 17 are scallop trawl vessels. It is not anticipated that the four scallop dredge vessels and 17 scallop trawl vessels will participate in the SEP due to the 10 DAS allocation for the 2000-2001 fishing year and the requirement of installing a VMS. It is also anticipated that the 17 scallop trawl vessels will not participate due to the additional cost of re-rigging their scallop trawl vessels to dredge vessels. If the vessels did participate, the costs of providing proof of VMS installation is estimated at \$1 a response, for a \$21 total cost. Because verification will be included with the permit application for full-time and part-time vessels, there is no additional cost for those vessels to mail in the verification.

B. Total operations, maintenance, and purchases of services component

The primary costs after purchase and installation of a VMS is the charge for the messages that communicate the vessel's position, catch and by-catch. The total costs for these messages depend on the system chosen for operation, either Boatracs or an Inmarsat system. There is no estimated maintenance charge for either system.

Boatracs, Inc. currently charges a flat rate for messaging of \$125/month, based on one message each hour of every day. In the case of the herring fishery, vessels will not have to transmit position reports when moored in port so the number of messages will be reduced, but it is uncertain if the company will reduce costs for fewer messages. Message costs are about \$0.10 per message for Inmarsat, or about \$75/month for a message each hour of every day.² Total annualized costs of VMS per vessel messaging are estimated to be \$1,500 for Boatracs and \$900 for an Inmarsat C system based on one message each hour of every day. Thus, based on 21 vessels being required to be newly equipped with a VMS, total message costs to the public are \$31,500 with Boatracs, and \$18,900 with Inmarsat. Because vessels will not be required to transmit hourly messages when moored in port, actual message costs for both systems will be less and will depend on how much vessels fish.

Additionally, the other 246 limited access scallop boats will incur only the cost of one new message per day in the SEP. These costs are estimated to be \$11,660.40 (for 14,760 messages times the daily charge of 10 cents per message).

¹ Information is based on personal communications with Bob Negroni of Boatracs, Inc.

² Information is based on personal communications with Sandra Yin of NMFS.

Total costs for installing and operating a VMS are summarized in Table 3. The costs to the industry from the VMS monitoring are expected, however, to be lower than estimated above. Cost estimates include message costs for one hourly message every hour of the year; the plan will only require messages when the vessel is underway, reducing communications costs. Most scallop vessels have already installed VMS. VMS also has positive impacts on the industry through improved enforcement, compliance, and management of the fishery resources as summarized under item 1 of this analysis.

Elimination of requirements with VMS monitoring/ Observer coverage

- Catch data handled electronically
- Discard data now available
- Reduced administrative costs
- Improved timeliness of data

Other benefits

VMS monitoring will also provide numerous benefits for vessels operations in terms of improved safety, flexibility, and vessel record keeping. Although these benefits to the public cannot be estimated in estimated in monetary terms, they are outlined below:

Benefits for vessel operations

- Improved safety
- More precise location allows faster response by rescue platforms
- 2-way communication allows vessels to communicate precise nature of problems
- Improved vessel record-keeping - more accurate plotting of tow results - catches, bottom characteristics and potential obstructions
- More accurate monitoring of vessel operations by owners who are not aboard the vessels
- Would provide secure 2-way communications between vessels and shore
- Allows vessels /companies to communicate valuable information about catches, markets, logistics, etc.
- The VMS would back-up global positioning systems currently used by vessels - this benefit will be greater when the LORAN system is eliminated in the future.
- As closed areas become more enforceable, they could be smaller - yet still result in an equivalent level of conservation.
- Would increase the flexibility of vessels operations by making area closure smaller or by making feasible measures that apply trip limits to specific areas.

Notifications

All SEP vessels must notify via VMS message their intent to fish in the closed areas for any given month (fifteen days prior to the month). Hour burdens and costs are itemized in Table 1. Full-time and part-time vessels incur a reporting burden of 73.9 hours and \$1,749.06; occasional

vessels, 0.70 hours and \$16.59. Cost is the product of the number of messages times 79 cents fixed rate per VMS e-mail message.

14. Provide estimates of annualized costs to the Federal Government.

The costs for VMS reporting requirements under the SEP are estimated at \$20,000 to the government and are summarized in Table 4. The NMFS Northeast Region currently operates a VMS system for the Atlantic sea scallop fishery. The estimates of the annual administrative and enforcement costs to the federal government from this program are summarized in Table 4. The costs were estimated by extrapolating the costs of the VMS experimental program to a year. The ongoing (recurring) costs amount to \$300,00 a year and include staff costs, internet connection, training, travel and the annual costs for equipment and the back-up system.³ These costs are not expected to increase with the VMS requirement for Occasional scallop fishermen. Respondents will submit verification of VMS installation as part of the permitting process, and the government will confirm receipt of proof through the review of permits. Costs associated with processing this verification are assumed to be insignificant when considering the current magnitude of the permitting program. No additional costs are expected to be incurred from the requirement to monitor reports received from Atlantic herring fishing vessels, as the system is highly automated and is already established.

The costs for expanding this program to Observer coverage are not well defined. The primary cost will be in the labor necessary to revise operating software to monitor an exempted fishery with different regulations, protected areas, and other requirements. NMFS estimates that it costs approximately \$100,000 to add 50-100 boats from another fishery to an existing VMS system. These costs were amortized over five years and added to the ongoing costs. The total annualized costs of VMS monitoring amount to \$320,000. Only \$20,000, however, is due to the requirement for VMS in the SEP because the other operating costs support the system's current use in the normal sea scallop fishery.

It is not possible to predict precisely at this moment if these costs would change in the future as more and more vessels are eventually added to the program. The Enforcement Office believes, however, that the present VMS monitoring capacity developed under the experimental program can handle a high number of vessels, including the 442 vessels with scallop limited access and multispecies individual days-at-sea permits, with no substantial increase in costs. At the present time, the system is only monitoring about 230 vessels in the sea scallop and multispecies fisheries. The addition of 21 vessels in the SEP is well within the capability of the existing system.

The overall administrative and enforcement costs, however, are expected to be lower than can be quantified within the framework of the present analysis. First, TAC's must be enforced in-season such that fishing mortality rates are not exceeded. Observers will be paid from an additional allocation above and beyond the trip limit. Also, without the VMS system, the only way to verify reported catch locations for those vessels not declared into the SEP is by examining sighting reports from enforcement units, a laborious process that is unlikely to be performed due to

³ Salary costs are those minimally associated with two GS-13 computer specialists and one GS-11 VMS technician required for daily operation and maintenance of the system. The costs include benefits.

manpower limitations. Third, vessel-generated geographical information will allow more efficient deployment of enforcement resources and would, therefore, increase efficiency and effectiveness in the use of current resources. This is especially so when re-opening formerly closed areas.

A VMS system could potentially enable the Coast Guard to fully meet its fisheries program standards without additional resources. Consequently, VMS is expected to result in significant savings in enforcement costs if its use is broadened to include vessels under the SEP.

In addition to these monetary benefits, VMS/Observer coverage in the SEP would significantly improve the Coast Guard's ability to detect violators and respond with the appropriate action. SEP vessels are allowed to fish in areas closed to groundfish vessels; the VMS requirement will help enforcement units sort vessels detected in the closed areas and determine who is fishing legally. It will augment cutter and aircraft patrols and allow them to be used to enforce other management measures. A VMS will also make boarding efforts more efficient, as it will help Coast Guard distribute boardings in a more equitable manner across all fleet sectors. Further discussion of additional benefits from VTS monitoring for the public and the government in terms of improved compliance, enforcement and management is provided in items 1, 5, and 13 above.

15. Explain potential changes in burden.

This request is for a revision of OMB approval for this VMS collection. The changes in burden requested are the result of program changes/additions that result in additional burden to the public. All burden figures are based on the estimated number of individuals affected. The actual number of individuals may differ from these estimates.

16. Describe any plans for statistical use of the information.

Results from this collection may be used in scientific, management, technical or general informational publications such as Fisheries of the United States, which follows prescribed statistical tabulations and summary table formats. Data are available to the general public on request in summary form only. Data are available to NMFS employees in detailed form on a need-to-know basis only.

17. Explain the reasons why display would be inappropriate.

There are no reasons why display would be inappropriate.

18. Explain exceptions.

There are no exceptions.

B. COLLECTION OF INFORMATION EMPLOYING STATISTICAL METHODS

No statistical methods are employed in the information collection procedures; the requirements are mandatory for participants in the Atlantic sea scallop fishery.

Table 1. Burden and Cost estimates for the Public and the Government

Requirement	Number of Entities	Items per Entity	Total Number of Items	Response Time	Total Burden	Cost of Time to Public ⁽¹⁾	Other Costs to Public ⁽²⁾⁽³⁾	Cost to Government ⁽⁴⁾
Vessel Monitoring System								
Installation	21	1	21	1	21	\$315		\$20,000
Verification requirement	21	1	21	.0834	1.751	\$26.27	\$21	N/A
Reporting burden – hourly	21	240	5,040	.0014	7.056		\$105.84	N/A
Purchase and operation	21						\$56,700.00	N/A
VMS / Observer Reporting Burden								
– Daily								
Full-time / Part-time	246	60	14,760	0.1667	2,460		\$11,660.40	\$4,910
Occasional	21	10	210	0.1667	35		\$165.90	N/A
VMS / Other Reporting Burden								
Full-time/Part-time	246	9	2,214	0.0334	73.9		\$1,749.06	N/A
Occasional	21	2	42	0.0334	1.40		\$33.18	N/A
VMS Polling Increase – Daily	267	10,408 ⁽⁵⁾	249,792	0.0083	2,073.27		\$124,896	N/A
Total			272,100		4,673.3	\$158,741	\$195,331	\$24,910

1. Assumed to be \$15 per hour.

2. Daily and Other reporting on VMS is \$0.79 fixed rate per VMS e-mail message (Boatrac).s).

3. Assumed to be \$0.50 per poll.

4. Assumed to be \$25 per hour (see Tables 3 & 4).

5. Estimated total days fished.

Table 2. Characteristics of limited access scallop vessels in fishing year 1999.

	Full-time	Part-time	Occasional
Large dredge	198	8	4
Small dredge	1	5	-
Trawl	15	21	17

Number of vessels = 267.

Table 3. Annualized VMS Cost Estimates for the Occasional vessels.

Equipment	Number of Entities	Equipment Costs	Total Equipment Costs	Annual Message Costs(1)	Total Message Costs	Total Annual Costs per Vessel	Total Costs
Boatracs	21	1,200	25,200	1,500	31,500	2,700	\$56,700
Inmarsat C	21	1,160	24,360	900	18,900	2,060	\$43,260

(1) Not including daily VMS emails by Observers or Operators

Table 4. Costs to the Government from VMS Monitoring.

VMS Monitoring Annual Costs	Salary and Benefits ¹	\$230,000
	Internet Connection ²	\$7,500
	Equipment ³	\$20,000
	Back-up System ⁴	\$38,960
	Software Licensing	\$3,500
	Supplies ⁵	\$11,000
	Training and travel	\$8,000
	Total Ongoing Costs	\$300,000
Start-up Costs	Software adaptations	\$100,000
	Total Fixed Costs	\$100,000
Total Annual Costs ⁶	Annualized Start-up Costs (at 5 year amortization)	\$20,000
		\$320,000
Previously Committed Costs		
Total Annual Costs⁷		\$300,000
Net Annual Costs to Government from Herring VMS Monitoring		
		\$20,000

Source: Data supplied by NMFS, Office of Enforcement, Northeast Regional Center, and NMFS Headquarters

1. Salary and benefits, three program support personnel.
2. 24-hour maintenance of secure internet node at Gloucester, MA.
3. Lease and maintenance contract on CPU and monitor.
4. Lease and maintenance contract on CPU and monitor
5. Optical storage disks, repairs and supplies associated with non-lease equipment (modem, router, printer, thermal paper, WORM drive).
6. Estimated by adding up annualized start-up costs (\$2,383) to total ongoing costs.
7. System operating costs currently funded to support program for the sea scallop fishery.

Table 5. Cost to Government from Daily VMS email.

Description	Time (hours)	Materials
1. Create and distribute new forms to all VMS boats	8	0
2. Change program to process new forms and write an output file comprised of delimited records. Email output file at predetermined intervals or post to an FTP site.	8	0
3. Documentation, notification, and training	8	\$500.00
4. Support 267 boats x .1 hour per boat	26.7	-
Total		\$4,910.00

Source: Boatracs